# PATENT COOPERATION TREATY

# **PCT**

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 20736 WO				FOR FURTHER A		See Form PCT/IPEA/416			
Internation	onal app	lication No.		International filing dat	e (day/month/year)	Priority date (day/month/year)			
PCT/EP2004/007918			18	15.07.200	4	15.07.2003			
Internation	International Patent Classification (IPC) or national classification and IPC								
B32B31/12, B32B15/08									
Applicant									
HEINRICH STRUNZ GMBH									
<u> </u>									
1.	<ol> <li>This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</li> </ol>								
2.	This R	EPORT consists	of a total of	10	sheets, including	g this cover sheet.			
3.	This re	port is also accon	npanied by A	NNEXES, comprising:					
	a. [	sent to the a	applicant and	to the International Bu	reau) a total of	sheets, as follows:			
ļ		•			,	mended and are the basis for this report and/or			
	sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).								
	sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.								
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				r readable form only, a trative Instructions).	s marcated in the Supple	mental box Relating to Sequence Listing (see			
4.	This re	port contains ind	ications relati	ng to the following iten	ns:				
	$\boxtimes$	Box No. I	Basis of the	report					
		Box No. II	Priority						
		Box No. III	Non-establi	shment of opinion with regard to novelty, inventive step and industrial applicability					
				ty of invention					
İ	Box No. V Reasoned statement under Article 35(2) with regard to nevelty, inventive step or industrial citations and explanations supporting such statement					तिपु, inventive अस्कू ज industrial applicability;			
	Box No. VI Certain documents cited								
l	$\bowtie$	Box No. VII	Certain def	ects in the international	application				
	$\boxtimes$	Box No. VIII	Certain obs	ervations on the interna	tional application				
Date of s	submiss	ion of the demand	1		Date of completion of th	is report			
Name and mailing address of the IPEA/EP					Authorized officer	442-444-444-444-444-444-444-444-444-444			
Facsimil	le No.				Telephone No.				

Translation

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Box	No. I	Basis of the report		
1.		to the language, this report is based on the internation der this item.	al application in the language in which i	t was filed, unless otherwise
		eport is based on translations from the original languag is the language of a translation furnished for the purpo		· · ·
		international search (Rule 12.3 and 23.1(b))		
		publication of the international application (Rule 12.4)		
		international preliminary examination (Rule 55.2 and/o		
2.	receiving O		report is based on (replacement sheets we referred to in this report as "originall"	hich have been furnished to the y filed" and are not annexed to
		ternational application as originally filed/furnished		
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	sheet	s*	received by this Authority on	
	a sequ	uence listing and/or any related table(s) - see Suppleme	ental Box Relating to Sequence Listing.	
3.	The #	amendments have resulted in the cancellation of:		
-		the description, pages		
	一百	the claims, nos.		
	$\Box$			
ļ	Ħ	the sequence listing (specify):		
	冒	any table(s) related to sequence listing (specify):		
	CT This	report has been established as if (some of) the amend	ments annexed to this report and listed	below had not been made since
4.	they	have been considered to go beyond the disclosure as fil	led, as indicated in the Supplemental Bo	x (Rule 70.2(c)).
		the description, pages		
		the claims, nos.		
		the drawings, sheets/figs		
		the sequence listing (specify):		
		any table(s) related to sequence listing (specify):		
*	If item 4 ap	oplies, some or all of those sheets may be marked "sup	erseded."	

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Box			ticle 35(2) with regard to novelty, inventive step or industrial applicability; porting such statement	
1.	Statement			
	Novelty (N)	Claims	1-17, 19, 25, 27, 28 18, 20-24, 26, 29, 30	_ YES
		Claims	18, 20-24, 26, 29, 30	_ NO
	Inventive step (IS)	Claims		_ YES
•		Claims	1-17, 19, 25, 27, 28	_ NO
	Industrial applicability (IA)	Claims	1-30	YES
		Claims		NO

2. Citations and explanations (Rule 70.7)

#### Claim 1

Document D1 (EP-A-1 044 796) discloses a method for the production of a laminate, said method comprising the following steps:

- introducing a continuous, non-polymer web of a semi-finished product (see column 4, line 21) into an aperture in a belt press;
- sealing the semi-finished product web relative to the aperture (sealing is automated due to the presence of a second belt press (figure 4));
- applying a curable plastics material to the semi-finished product web (see column 3, lines 30 and 31);
- curing the plastics material, thereby causing the plastics material and the semi-finished product web to bond.

The subject matter of claim 1 differs from the method known from D1 by virtue of the use of a process film.

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This feature has already been used for the same purpose (preventing undulation: see D2 (DE-A-34 13 053), page 3, lines 15-17) in a similar laminating method (see document D2, in particular figure 1 and the related description, pages 4 and 5) bands 3 and 4 being regarded as process foils. For a person skilled in the art, it would therefore be obvious that the feature known from D2 can also be applied in a straightforward manner and to like effect to a laminating method as per document D1. In this way, he would arrive at a laminating method as per claim 1, without thereby being inventive.

In consequence, the subject matter of claim 1 does not involve an inventive step and said claim fails to satisfy the requirements of PCT Article 33(3).

#### Claims 2-9

Dependent claims 2-9 disclose features that are:

- either known from D1 (for example, compare the introduction, as per the present claim 3, of a reinforcing material into the curable plastics materialwith D1, paragraph 7);
- or within the design experience of a person skilled in the art, see for example the evacuation process as per the present claim 5.

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## Claim 10

Document D1 also discloses a device for carrying out the method disclosed in said document (see figure 4).

Thus, the subject matter of claim 10 differs from the laminating device known from D1 in that a material store is provided for the continuous output of a process film.

These features (material store and process film) have already been used for the same purpose (preventing undulation: see D2 (DE-A-34 13 053), page 3, lines 15-17) in a similar laminating method (see document D2, in particular figure 1 and the description, pages 4 and 5, bands 3 and 4 being regarded as process foils. For a person skilled in the art, it would therefore be obvious that the feature known from document D2 can also be applied in a straightforward manner and to like effect in a laminating method as per document D1. In this way, said expert would arrive at a laminating device as per claim 1, without thereby being inventive.

Therefore, the subject matter of claim 10 does not involve an inventive step and said claim fails to satisfy the requirements of PCT Article 33(3).

#### Claims 11-17

Dependent claims 11-17 disclose features which are either:

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

- known from D1 (for example, compare the conveying means, as per the present claim 16, with D1, paragraph 7); or
- within the design experience of a person skilled in the art (for example the heating and tempering plates according to the present claim 15).

# Claim 18

Document D1 (EP-A-1 044 796) discloses a method for the production of a laminate, said method comprising the following step:

- preparing a supporting surface (one of the two band presses is considered to be a supporting surface);
- introducing a continuous, non-polymer web of a semi-finished product (see column 4, line 21) into an aperture in a belt press;
- sealing the semi-finished product web relative to the aperture (sealing is automated due to the presence of a second belt press (figure 4));
- applying a curable plastics material to the semi-finished product web (see column 3, lines 30 and 31);
- curing the plastics material, thereby causing the plastics material and the semi-finished product web to bond.

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The feature concerning the "preparation of at least one optional process film" is purely optional and, in consequence, does not restrict the scope of protection of the claim.

Thus, the subject matter of claim 18 lacks novelty and said claim fails to meet the requirements of PCT Article 33(2).

#### Claims 19-25

Dependent claims 19-25 disclose features that are either:

- known from D1 (for example, compare the introduction of reinforcing material into the curable plastics material, as per the present claim 20, with D1, paragraph 7); or
- within the design experience of a person skilled in the art (for example the evacuation process as per the current claim 21).

#### Claim 26

Document D1 also discloses a device for carrying out the known method (see figure 4) as per claim 18. Thus, D1 discloses all the device features required for carrying out the method of interest.

In consequence, the subject matter of claim 26 lacks novelty and said claim fails to meet the requirements of PCT Article 33(2).

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#### Claims 26-29

Claims 26-29 disclose features that are:

- either known from D1 (for example, compare the device for storing and outputting reinforcing material, as per the present claim 28, with D1, paragraph 7); or
- within the design experience of a person skilled in the art, for example the outputting of adhesive strips as per the present claim 28.

#### Claim 30

D1 also discloses the product, namely a plastics-metal laminate (see paragraph 5), produced by means of the method known from said document.

Since the plastics-metal laminate is intended for the same type of application (motor vehicle construction) as that to which the present application relates (see the summary of invention in D1), it has been assumed that the ballistic properties are identical.

In consequence, the subject matter of claim 30 lacks novelty and said claim fails to satisfy the requirements of PCT Article 33(2).

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Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

- 1. Contrary to PCT Rule 5.1(a)(ii), the description does not cite documents D1 or D2 or indicate the relevant prior art disclosed therein.
- The independent claims have not been drafted in the two-part form defined by PCT Rule 6.3(b). Accordingly, the features known in combination from the prior art (document D1) should have been placed in the preamble (PCT Rule 6.3(b)(i)) and the remaining features specified in the characterising part (PCT Rule 6.3(b)(ii)). This applies in respect of the device claims as well as the method claims.
- 3. The requirements of the PCT Guidelines (paragraph 10.12(iii)) have not been complied with since there are two independent method claims and also two independent device claims.

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Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

- 1. [German text only] On page 8, "Halbzeugahn"
   [instead of "Halbzeugbahn", web of semi-finished
   product] is clearly a typographical error
- The expressions "substantially non-polymer" and "practically" render claims 1 and 8 unclear (PCT Article 6) since these expressions do not have a precise technical definition.